

## Product datasheet for **AM32987PU-N**

### EGFR Mouse Monoclonal Antibody [Clone ID: DP-4A1]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	DP-4A1
Applications:	ELISA, FC, WB
Recommended Dilution:	<b>Flow Cytometry:</b> 1.2 µg/10 <sup>6</sup> cells. <b>Cell based ELISA</b> with intact, transiently transfected cells: 1/200-1/400.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	cDNA encoding Human ErbB-1
Specificity:	Recognizes Epidermal growth factor receptor (EGFR; ErbB-1). <b>Selection:</b> Based on recognition of the complete native protein expressed on transfected mammalian cells.
Formulation:	PBS, pH 7.2 State: Purified State: Liquid purified IgG fraction
Concentration:	lot specific
Purification:	Affinity Chromatography on Protein G
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	epidermal growth factor receptor
Database Link:	<a href="#">Entrez Gene 1956 Human P00533</a>



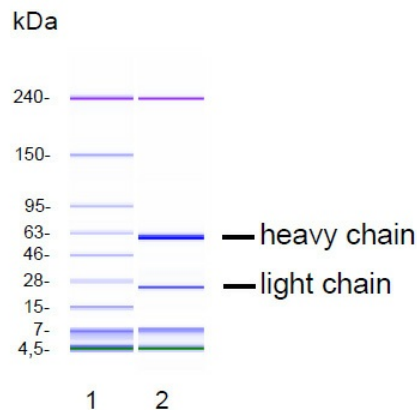
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**Background:**

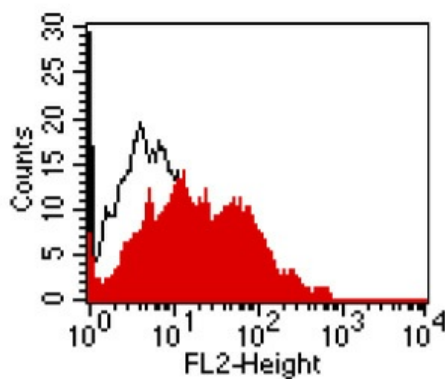
Epidermal growth factor receptor (EGFR; ErbB-1) is a 170-kDa transmembrane glycoprotein encoded by the HER1 proto-oncogene. It belongs to the EGFR family of receptors, a subfamily of four closely related receptor tyrosine kinases: EGFR (ErbB-1), HER2/c-neu (ErbB-2), Her3 (ErbB-3) and Her4 (ErbB-4). ErbB-1 is expressed on the cell surface and is activated by binding of its specific ligands, including epidermal growth factor and transforming growth factor  $\alpha$  (TGF $\alpha$ ). Growth factor binding to the extracellular domain of ErbB-1 induces formation of homoand heterodimers with another member of the ErbB receptor family. The EGFR signaling pathway is one of the most important pathways that regulate growth, survival, proliferation and differentiation in mammalian cells, while over-expression of ErbB-1 have been associated with a number of cancers, including lung cancer and glioblastoma (2,3).

**Synonyms:**

Epidermal growth factor receptor, EGF Receptor, erbB-1, c-ErbB-1

**Product images:**


CGE analysis of purified DP-4A1 monoclonal antibody. Lane 1: molecular weight marker, Lane 2: 2 ug of purified DP-4A1 antibody. Proteins were separated by CGE (capillary gel electrophoresis, Agilent 2100 Bioanalyzer). Internal control bands (240 kDa / 7 kDa / 4, 5 kDa).



— ErbB-1 transfectant  
— control transfectant

FACS analysis of BOSC23 cells using DP-4A1. BOSC23 cells were transiently transfected with an expression vector encoding either ErbB-1 (red curve) or an irrelevant protein (control transfectant: black curve). Binding of DP-4A1 was detected with a PE-conjugated secondary antibody. A positive signal was obtained only with ErbB-1 transfected cells.